

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-13-28
Relating to Certification of New Heavy-Duty Off-Road Equipment Engines

DEUTZ AG

Pursuant to the authority vested in the Air Resources Board at Sections 43000.5, 43013, and 43018 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned at Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following diesel engines and exhaust emission control systems produced by the manufacturer are certified as described below for use in heavy-duty off-road equipment:

Model Year: 2000

Typical Equipment Usage: Pump, Generator Set

Engine Power Ratings Range: 175 – 750 horsepower, inclusive

Fuel Type: Diesel

<u>Engine Family</u>	<u>Displacement</u>		<u>Exhaust Emission Control Systems and Special Features</u>
	<u>Liters</u>	<u>Cubic Inches</u>	
YDZXL06.1008 (BF6L 913C)	6.1	374	Turbocharger Charge Air Cooler Smoke Puff Limiter

The engine models and codes are listed on attachments. Production engines shall be in all material respects the same as those for which certification is granted.

The exhaust emission certification standards and certification values in grams per brake horsepower-hour (g/bhp-h) for total hydrocarbons (THC), carbon monoxide (CO), nitrogen oxides (NOx), and particulate matter (PM), and the opacity-of-smoke certification standards and certification values in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family are as follows (Title 13, California Code of Regulations, Section 2423):

	<u>Exhaust Emissions (g/hp-h)</u>				<u>Smoke Opacity (%)</u>		
	<u>THC</u>	<u>CO</u>	<u>NOx</u>	<u>PM</u>	<u>Accel</u>	<u>Lug</u>	<u>Peak</u>
Standard	1.0	8.5	6.9	0.4	20	15	50
Certification	0.4	1.0	6.6	0.3	11	10	17

BE IT FURTHER RESOLVED: That the engine models listed on the attachments with engine power ratings less than 175 horsepower are not covered by this Executive Order.

BE IT FURTHER RESOLVED: That the listed engine models comply with "Exhaust Emission Standards and Test Procedures -- Heavy-Duty Off-Road Diesel-Cycle Engines" (Title 13, California Code of Regulations, Section 2423) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That the listed engine models also comply with "Emission Control Labels --1996 and Later Heavy-Duty Off-Road Diesel-Cycle Engines" (Title 13, California Code of Regulations, Section 2424) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Sections 2425 *et seq.*).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Executed at El Monte, California this 7th day of February 2000.



R. B. Summerfield, Chief
Mobile Source Operations Division

U-R-13-28

YDZXL06.1008

List of emission related components

Engine type	Displacement	Engine code	HP	Nominal Power ± 5%	Nominal Power ± 5%	Nominal speed ± 50 rpm	Mean effective pressure	Injection rate at nom. speed, $\pm 4mm^3$	Peak torque ± 5%	Speed at peak torque ± 100 rpm	Mean effective pressure at peak torque	Injection rate at peak torque $\pm 4mm^3$
	cm ³		kW	rpm	bar	mm ³ /stroke	Nin	rpm	bar	mm ³ /stroke		
BF6L913C	6128	C141	189	141	2500	11.04	92	670	1625	13.74	101	
BF6L913C	6128	C141/1	189	141	2500	11.04	92	670	1625	13.74	101	
BF6L913C	6128	C136	182	136	2500	10.65	89	646	1625	13.25	97	
BF6L913C	6128	C133	178	133	2500	10.42	87	646	1625	13.25	97	
BF6L913C	6128	C131	176	131	2500	10.26	86	622	1625	12.76	94	
BF6L913C	6128	C134	180	134	2300	11.41	91	643	1625	13.31	98	
BF6L913C	6128	C132	177	132	2300	11.24	89	639	1625	13.11	96	
BF6L913C	6128	C128	172	128	2300	10.90	86	619	1625	12.70	93	
BF6L913C	6128	C125	168	125	2300	10.64	83	599	1625	12.27	90	
BF6L913C	6128	C118/1	158	118	2300	10.05	81	585	1625	12.00	88	
BF6L913C	6128	C126	169	126	2150	11.48	89	619	1625	12.70	93	
BF6L913C	6128	C122	163	122	2150	11.11	86	602	1625	12.35	91	
BF6L913C	6128	C121	162	121	2150	11.02	85	598	1625	12.27	90	
BF6L913C	6128	C118	158	118	2150	10.75	82	585	1625	12.00	88	
BF6L913C	6128	C121/1	162	121	2000	11.85	89	619	1625	12.70	93	
BF6L913C	6128	C117	157	117	2000	11.45	88	602	1625	12.35	91	
BF6L913C	6128	C114	153	114	2000	11.16	84	587	1625	12.04	88	
BF6L913C	6128	C111	149	111	1800	12.07	89	602	1625	12.35	91	
BF6L913C	6128	C99	133	99	1800	10.77	82	530	1625	10.87	85	
BF6L913C	6128	C96	129	96	1800	10.44	80	530	1625	10.87	85	
BF6L913C	6128	C95	127	95	1800	10.33	80	530	1625	10.87	85	
BF6L913C	6128	D151	202	151	1800	16.43	133	n.a.	n.a.	n.a.	n.a.	
BF6L913C	6128	D143.5	192	144	1800	15.61	126	n.a.	n.a.	n.a.	n.a.	
BF6L913C	6128	D136.5	183	137	1800	14.85	110	n.a.	n.a.	n.a.	n.a.	
BF6L913C	6128	D129	173	129	1800	14.03	104	n.a.	n.a.	n.a.	n.a.	
BF4L913C	4086	C84	113	84	2300	10.73	90	400	1650	12.31	91	